

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted from the academic year 2019 - 2020)

SUBJECT CODE: 19BI/PC/CP14
M. Sc. DEGREE EXAMINATION, NOVEMBER 2019
BIOINFORMATICS
FIRST SEMESTER

COURSE : CORE
PAPER : PROGRAMMING IN C++ AND PERL
TIME : 1½ HOURS

MAX. MARKS: 50

SECTION – A

ANSWER ALL THE QUESTIONS:

(20x1=20)

1. Find the errors in the following statements:
 - a) `for(i=1;int i<10;i++) cout<< i <<"\n";`
 - b) `long float x;`
2. What will the output of the following code?
`#include <iostream.h>`
`void main(){ int i=0;i=400*400/400;cout<< i;}`
3. Debug the program and print the output
`#include <iostream.h>`
`void main(){ int num[]={1,2,3,4,5,6};`
`num[1]==[1]num ? cout<< "Success" : cout<< "Error";}`
4. The operator `>>` is known as _____ operator.
5. The variables declared inside the class are known as _____ and the functions are known as _____.
6. Friend functions have access to only public members of a class. (True/False)
7. Write the statement to create an integer object `int1` and pass the values 0 and 100 to it.
8. While loop in C++
9. Define scalar types.
10. Create a hash with the keys being names of fruits and the values being their color.
11. What does the following line of code do in Perl? `print for 1..10;`
12. Write a regular expression that matches a social security number eg., 123-45-6789
13. What are the three arguments to open a file in Perl?
14. _____ is a way of providing a name to a piece of code that is useful to execute the same piece of code in several different places in your program.
15. Data encapsulation in C++
16. PERL stands for _____.
17. Give the difference between constructor and destructor
18. The _____ package is intended to enable the easy access and manipulation of biology relational databases via a perl interface.
19. _____ object is built to open and parse all the common sequence formats, it can read and write files and is built to operate with all the other Bioperl modules.
20. A module can be loaded by calling the _____ function.

SECTION – B**ANSWER ANY TWO QUESTIONS:****(2x15=30)**

21. Write a short note on variables and functions in C++.
22. What does inheritance mean in C++? What are the different forms of inheritance? Give an example for each.
23. Describe any 5 built-in functions with its parameters in PERL and return value with examples.
24. What is Bioperl? Explain the architecture and uses of BioPerl.
